

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Currently Amended) A light emitting device comprising:

a driving substrate;

a resonator structure comprising a first electrode on the driving substrate, an electron hole transport layer on the first driving substrate, a light emitting layer on the electron hole transport layer, an electron transport layer on the light emitting layer, and a second electrode on the electron transport layer; and

a color filter disposed over the second electrode,

wherein,

the first electrode and second electrode both reflect light,

the second electrode has a refractive index of 1 or less and acts as a semi-transparent semi-transparent reflection layer,

the resonator structure resonates light generated in the light emitting layer, and light is extracted from at least the second electrode side of the resonator,

the materials and thicknesses of the first and second electrodes are selected such that the first and second electrode both reflect light outside light at substantially the same strength and approximately inverted phases, and

the first electrode and the second electrode of the light emitting device reflect 20% or less of incident outside light in resonant wavelengths.

2. (Currently Amended) A light emitting device comprising:

a driving substrate;

a resonator structure comprising a first electrode on the driving substrate, an electron hole transport layer on the first driving substrate, a light emitting layer on the electron hole transport layer, an electron transport layer on the light emitting layer, and a second electrode on the electron transport layer; and

a color filter disposed over the second electrode;

wherein,

the second electrode has a refractive index of 1 or less and acts as a semi-transparent semi-transparent reflection layer,

the first electrode and second electrode both reflect light,

the resonator structure resonates light generated by the light emitting layer, and light is extracted from at least the second electrode side of the resonator,

the first electrode and the second electrode of the light emitting device reflect 20% or less of incident outside light in resonant wavelengths,

the materials and thicknesses of the first and second electrodes are selected such that the first and second electrode both reflect light outside light at substantially the same strength and approximately inverted phases, and

an optical distance L satisfies mathematical formula 1, where Φ is a phase shift of reflected light generated by the first electrode and the second electrode, L is the optical distance between the first electrode and the second electrode, and λ is a peak wavelength of a spectrum of a light extracted from the second electrode so that the phase of the outside light which is reflected by the first electrode and the phase of the outside light reflected by the second electrode are inverted.

[Mathematical formula 1]

$(2L)/\lambda + \Phi/(2\pi) = m$ (m is an integer which makes L positive.)

3. (Cancelled)

4. (Previously Presented) A light emitting device according to claim 1, wherein a semi-transparent reflection layer is provided on the second electrode, and the extinction coefficient of the semi-transparent reflection layer is 0.5 or more.

5. (Previously Presented) A light emitting device according to claim 4, wherein the semi-transparent reflection layer has a refractive index of 1 or less.

6.-7. (Cancelled)

8. (Currently Amended) A display unit comprising:

a driving substrate;

a plurality of light emitting devices each having a resonator structure comprising a first electrode on the driving substrate, an electron hole transport layer on the first driving substrate, a light emitting layer on the electron hole transport layer, an electron transport layer on the light emitting layer, and a second electrode on the electron transport layer; and

a like plurality of colors filters each disposed over a respective second electrode,

wherein,

the second electrode has a refractive index of 1 or less and acts as a semi transparent semi-transparent reflection layer,

the first electrode and second electrode both reflect light,

each resonator structure resonates light generated by the light emitting layer and light is extracted from at least the second electrode side of the resonator,

the first electrode and the second electrode of the light emitting device reflect 20% or less of incident outside light in resonant wavelengths,

the materials and thicknesses of the first and second electrodes are selected such that the first and second electrode both reflect light outside light at substantially the same strength and approximately inverted phases, and

an optical distance L satisfies mathematical formula 1, where Φ is a phase shift of reflected light generated by the first electrode and the second end, L is the optical distance between the first and second electrode, and λ is a peak wavelength of a spectrum of a light extracted from the second electrode so that the phase of the outside light which is reflected by the first electrode and the phase of the outside light reflected by the second electrode are inverted.

[Mathematical formula 1]

$$(2L)/\lambda + \Phi/(2\pi) = m \quad (m \text{ is an integer which makes } L \text{ positive.})$$

9. (Currently Amended) A display unit comprising:

a plurality of light emitting devices each having a resonator structure comprising a first electrode on a driving substrate, an electron hole transport layer on the first driving substrate, a light emitting layer on the electron hole transport layer, an electron transport layer on the light emitting layer, and a second electrode on the electron transport layer;

a like plurality of color filters each disposed over a respective second electrode,

wherein,

the second electrode has a refractive index of 1 or less and acts as a semi transparent
semi-transparent reflection layer,

the first electrode and second electrode both reflect light,

the resonator structure resonates light generated by the light emitting layer, and light is extracted from at least the second electrode side of the resonator,

the first electrode and the second electrode of the light emitting device reflect 20% or less of incident outside light in resonant wavelengths, and

the materials and thicknesses of the first and second electrodes are selected such that the first and second electrode both reflect light outside light at substantially the same strength and approximately inverted phases.

10. (Cancelled)

11. (Previously Presented) A display unit according to claim 8, wherein a semi-transparent reflection layer is provided on the second end, and the extinction coefficient of the semi-transparent reflection layer is 0.5 or more.

12. (Previously Presented) A display unit according to claim 11, wherein the semi-transparent reflection layer has a refractive index of 1 or less.

13.-14. (Cancelled)